List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 7   (Cancelled)

8.   (New) A method for determining a measuring point in time (t_M), at which a measured value is to be produced by a field device of process automation technology, comprising the steps of:

communicating measured values of the field device at certain communication points in time (t_K) via a field bus following a query from a central control unit for measured values of the field device;

at least approximately determining a communication point in time (t_f) from at least two communication points in time (t_K, t'_K); and

determining the measuring point in time (t_M) on the basis of said approximately determined communication point in time (t_f).

9. (New)   The method as claimed in claim 8, wherein:

the measurement point in time (t_M) is also communicated with the measured value.

10. (New) The method as claimed in claim 8, wherein:

the communication point in time (t_f) is approximated from at least one time span (A) between at least two preceding communication points in time (t_K, t'_K) and a preceding communication point in time (t''_K).

11. (New) The method as claimed in claim 8, further comprising the step of:

calculating at least two time spans (A_1, A_2) between, in each case, at least two preceding communication points in time (t_{K1}, t'_{K1}, t_{K2}, t'_{K2});

forming an average value (M) from the time spans (A_1, A_2);   and

approximating the following communication point in time (t_f) starting from the

4

average value (M) and a preceding communication point in time (t''_K).

12. (New) The method as claimed in claim 8, wherein:

in the case where the time span (A_b) to the approximated communication point in time (t_f) is smaller than a smallest value (K), the communication point in time (t_f) is approximated starting from this smallest value (K); and

the smallest value (K) is determined from the minimum time span (A_{min}), which is possible between two measurements following one after the other, considering technical constraints.

13.   (New) The method as claimed in claim 8, wherein:

in the case, where the time span (A_b) to the approximated communication point in time (t_f) is greater than a limit value (G), the communication point in time (t_f) is approximated starting from the time span (A'_b), which was used for the approximation of the preceding approximated communication point in time (t'_f); and

the limit value (G) represents a boundary between a time span between queries in a normal communication cycle and a time span in a disturbed communication cycle of the control unit.

14.   (New) An apparatus for determining a measured point in time (t_M), comprising:

a control unit;

at least one field bus communication unit, which, in the case of a query from said control unit, communicates at least one measured value; and

at least one output/control unit, which controls the measuring point in time (t_M) of said field device, wherein:

said at least one field bus communication unit transmits at least the communication point in time (t_K) to said output/control unit.

5